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Development and Evaluation of an Experimental Curriculum for the New Quincy (Mass.) Vocational-Technical School. Fourth Quarterly Technical Report, a Vocational Guidance Plan for Junior High School.

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Activity from January 1 through March 31, 1966 was centered on the derivation of topic objectives for each course of study and on the completion of junior high school guidance program plans. This report describes the procedures for developing the guidance program by describing the guidance program as it now exists in the Quincy Public Schools, defining specific objectives and requirements for a guidance program adequate to the new school program, defining a plan for meeting each program objective, developing a plan for training counselors and teachers, developing materials to support staff training and the guidance program, installing and trying out guidance programs, and evaluating the program. The guidance program has been organized into study units which the student will cover every year in the sequence listed (1) identifying student goals, (2) assessing student objectives, (3) identifying educational and vocational opportunities, (4) selecting a course of action, and (5) adjusting decisions. The plan calls for developing a counselor handbook specifying all counselor activities by grade and a student handbook or portfolio describing and scheduling all guidance activities. An appendix gives the general vocational objectives state in terms of student behavior. Other reports are available as VT 001 392-001 397, VT 004 848, and ED 013 318. (HC)

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FOURTH QUARTERLY TECHNICAL REPORT

Contract No. OE-5-85-019

DEVELOPMENT AND EVALUATION OF AN EXPERIMENTAL CURRICULUM FOR THE NEW QUINCY (MASS.) VOCATIONAL-TECHNICAL SCHOOL

A Vocational Guidance Plan for Junior High School

31 March 1966

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

VT001395

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OFFICE OF EDUCATION

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American Institutes for Research
Pittsburgh, Pennsylvania

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FOREWORD

This report, submitted in compliance with Article 3 of the contract, reports on technical activities of Project ABLE during its fourth quarter of operation, 1 January through 31 March 1966. A brief overview of the project is presented first, followed by a report summary. The major portion of the report is devoted to presentation of the vocational guidance plans for junior high school students. Project plans for next quarter are outlined.

OVERVIEW: Project ABLE

A Joint Research Project of: Public Schools of Quincy, Massachusetts and American Institutes for Research

Title: DEVELOPMENT AND EVALUATION OF AN EXPERIMENTAL CURRICULUM FOR THE NEW QUINCY (MASS.) VOCATIONAL-TECHNICAL SCHOOL

Objectives: The principal goal of the project is to demonstrate increased effectiveness of instruction whose content is explicitly derived from analysis of desired behavior after graduation, and which, in addition, attempts to apply newly developed educational technology to the design, conduct, and evaluation of vocational education. Included in this new technology are methods of defining educational objectives, deriving topical content for courses, preparation of students in prerequisite knowledges and attitudes, individualizing instruction, measuring student achievement, and establishing a system for evaluating program results in terms of outcomes following graduation.

Procedure: The procedure begins with the collection of vocational information for representative jobs in eleven different vocational areas. Analysis will then be made of the performances required for job execution, resulting in descriptions of essential classes of performance which need to be learned. On the basis of this information, a panel of educational and vocational scholars will develop recommended objectives for a vocational curriculum which incorporates the goals of (a) vocational competence; (b) responsible citizenship; and (c) individual self-fulfillment. A curriculum then will be designed in topic form to provide for comprehensiveness, and also for flexibility of coverage, for each of the vocational areas. Guidance programs and prerequisite instruction to prepare junior high students also will be designed. Selection of instructional materials, methods, and aids, and design of materials, when required, will also be undertaken. An important step will be the development of performance measures tied to the objectives of instruction. Methods of instruction will be devised to make possible individualized student progression and selection of alternative programs, and teacher-training materials will be developed to accomplish inservice teacher education of Quincy School Personnel. A plan will be developed for conducting program evaluation not only in terms of end-of-year examinations, but also in terms of continuing follow-up of outcomes after graduation.

Time Schedule: Begin 1 April 1965

Complete 31 March 1970

Present Contract to 30 June 1966

REPORT SUMMARY

During the present reporting period, technical activity centered on the derivation of topic objectives for each course of study and on the completion of junior high school guidance program plans. Since the work in vocational analysis and in curriculum development, including the derivation of topic objectives, has been described in previous reports, the present report is devoted to the guidance program which has been developed concurrently with the other project activities. This report reviews the procedure being followed to develop the guidance program, summarizes the status of program development, identifies and discusses the principles employed to guide planning for the junior high program, and describes the junior high plan for achieving each objective of the guidance program.

During the next quarter, instructional materials, methods, aids, and procedures, as well as performance measures, will be under development. In addition, development of junior high materials to support the guidance program and guidance staff training will begin.

A VOCATIONAL GUIDANCE PLAN FOR JUNIOR HIGH SCHOOL

The importance of an effective vocational guidance program in both junior and senior high schools was recognized in the original planning for Project ABLE (American Institutes for Research, 1964). From the start, work on development of the guidance program has proceeded concurrently with the vocational analysis and curriculum development. This report, the latest of several in which guidance program development has been discussed, briefly reviews the procedure being used to develop the program, identifies the major principles guiding the formulation of the junior high guidance plan, and then describes the junior high plan.

Guidance Program Development

The procedure for development of the guidance program, described and scheduled in the first technical report (American Institutes for Research, 1965a), includes the following seven major steps, for each of which a brief status summary is given:

1. Describe the guidance program as it now exists in the Quincy Public Schools. This description was presented in the first technical report (American Institutes for Research, 1965a).

2. Define specific objectives and requirements for a guidance program adequate to the new school program. Guidance program objectives were identified and discussed as part of the report (American Institutes for Research, 1965b) which reviewed criteria for objectives, described the logical structure relating specific objectives to broad educational goals, and illustrated the application of the logical structure in Project ABLE.

3. Define a plan for meeting each program objective. This has been the primary activity in guidance program development during the past quarter. Some implications of the study of

objectives for guidance curriculum were identified and included in the third technical report (American Institutes for Research, 1965c), together with implications for other parts of the total curriculum. Priority in the development of guidance plans has been given to the junior high program in order to provide guidance, beginning in September, 1966, for the ninth grade students who will be eligible for the first class in the new school. The present report describes the junior high plan. Development of the senior high program will begin in the fall and will be described in subsequent reports.

4. Develop plan for training counselors and teachers. Preliminary plans for junior high staff training are described in this report.

5. Develop materials to support staff training and the guidance program. This development has begun for the junior high program and will be the major activity until the start of school in September.

6. Install and tryout guidance programs. Junior high tryout is scheduled for the 1966-1967 school year. Senior high tryout begins with opening of the new school in September, 1967.

7. Program evaluation. Guidance program evaluation is planned as an integral part of the total program evaluation, preparation for which is scheduled to begin in March, 1967.

While following the procedure sketched above for developing objectives, plans, and materials, guidance personnel have kept informed about the work in vocational analysis and curriculum development. Detailed knowledge of such facts as the vocational areas and occupations for which training will be offered, of the instructional procedures to be employed, of the requirements to be imposed on students, and of the levels of skill to which students may aspire in each program will be employed in assisting students to

make informed and reasonable choices among vocations and the educational paths to vocational goals.

A number of principles have been applied in the development of the guidance plan for junior high students. Before presenting the details of the plan, it may be helpful to review the principles which guided the development and which characterize the plan.

Planning Principles

It was taken as fundamental in developing this plan that the guidance program must prepare students and their parents to choose a high school educational program. A major fact with which a junior high guidance program must deal is that every student will be required in the ninth grade to specify his high school course selections. This requirement is not just an arbitrary administrative demand; it is a practical necessity. The selections made in ninth grade are not irreversible, but they define a choice which leaves open one set of educational and vocational goals while making others less likely to be attained. The principal choice implied in the selection of courses is between programs which prepare for direct entrance to a four-year college and programs with other goals. It is possible to alter this choice after ninth grade, but alteration becomes more difficult and the penalties for change become more severe as the student proceeds on an inappropriate course of study. It is advantageous at every point, and especially in ninth grade, to make choices which do not require change. The program described in this report is directed to preparing students and their parents to make an appropriate and stable choice of high school program.

A second principle, corollary to the first, is that the program developed here should have limited objectives. Traditionally, and through necessity, guidance personnel have performed a wide variety of functions in addition to those associated with educational and vocational decisions. The plan reported here, however, is not intended to encompass all functions. It is intended to provide the junior high student and his parents with information about the student, about occupational opportunities, and about

educational routes to those opportunities. It also is intended to provide a systematic procedure for reaching decisions about individual goals and means to those goals. It is a plan for vocational guidance which is only part of the more comprehensive program now operating in Quincy. As such, it is intended to complement and rely upon services and functions otherwise provided. It is not intended to incorporate, replace, or duplicate existing functions.

A third principle applied in developing the plan is that the guidance program must be an integral part of the educational process and must contribute to the satisfaction of educational objectives. In the Second Quarterly Technical Report (American Institutes for Research, 1965b), the general educational goals of Project ABLE were analyzed. Specific educational objectives were identified and related to the general goals by means of a logical structure. Vocational satisfaction, one of the general goals, was defined to include three major sets of objectives: those required for choosing a career; those for forging a career; and those for demonstrating basic occupational skills. The junior high guidance plan is intended to prepare students to meet the objectives supporting career choice and some objectives supporting the forging of a career. Appendix A provides an organized list of the vocational objectives which students may be expected to achieve as a result of the guidance program. Parenthetically, it is important to notice that "vocation" has been used here in its broadest sense. The vocations to be considered by students include, in principle, all of the ways in which one may legitimately earn a livelihood. Thus, the plan provides for consideration by the students of preparation for professional, business, scientific, and technical careers as well as for careers in the trades and in industrial occupations.

Since the program intends to prepare individuals to make decisions and choices, it was taken as a fundamental principle that each student should be involved actively and primarily in the identification of his own goals and in planning his own route to those goals. It was recognized that a very large variety and range of individual differences should be expected in the abilities, interests, life situations, and goals of the students. As in the

curriculum development, it was clear that only through individualization of program activities could each student develop and plan for goals which were reasonable, relevant, and acceptable to him. It is planned, therefore, that each student will assume as much responsibility as he can for the decision making required in his vocational planning. The plan emphasizes individual, independent student activity and small-group work; it de-emphasizes lectures and other large-group presentations.

The last of the planning principles to be discussed here actually constitutes a strategy for meeting the objectives of the program. In each junior high year, the student will go through the same step-by-step procedure of data gathering, analysis, and tentative choice among educational programs and vocational goals. Each cycle through the procedure will be more thorough and more specific than the preceding year's cycle. In grade nine, the procedure will lead naturally to the choice of a high school program as required of every ninth grade student. It is expected that this successive cycling plan will permit students not only to acquire a substantial amount of information about themselves, about occupations, about educational opportunities and requirements, and about sources of information, but also to learn to apply a systematic procedure in decision making. It is hoped that both information and the problem-solving techniques will be transferred by the student to later situations in the continuing process of vocational evaluation and choice.

With these principles identified, we turn now to description of the program itself.

The Guidance Plan

In a previous report (American Institutes for Research, 1965b), eight major objectives were defined for the guidance program as follows:

1. Identifies the immediate and future goals of each student
2. Periodically evaluates each student with respect to characteristics important for the selection and achievement of goals

3. Identifies and informs the student about the educational and vocational opportunities available to him
4. Identifies and informs the student about the conditions and requirements of each available opportunity
5. Analyzes the consistency among student goals, capabilities and interests, and student educational and vocational opportunities
6. Together with the counselor, selects realistic courses of action
7. Adjusts decisions as conditions change in the individual or in his opportunities
8. Evaluates program effectiveness in terms of student outcomes

Except for the last objective (program evaluation), each program objective can be stated as an objective for the student. The guidance plan is that the student will work on each objective every year in the sequence listed. This work has been organized into units which will be completed in the following order each year:

- Identifying Student Goals
- Assessing Student Characteristics
- Identifying Educational and Vocational Opportunities
- Selecting a Course of Action
- Adjusting Decisions

The following description of the guidance plan is organized by study unit. Later sections discuss the training of staff and the development of materials.

Identifying student goals. The first objective requires identification of the immediate and future goals of each student. At the beginning of the school year, the student attends one to three group orientation sessions. At this time, the counselor presents an overview of all the vocational guidance activities in which students will participate during the year.

The counselor explains what will be expected of the student and what services guidance personnel will provide for the student, thereby establishing goals for students and for staff members. Counselors then will distribute materials to the students for completing the first vocational guidance assignment. These sessions are particularly critical for the seventh grade students who will be taking on new responsibilities for their own educational development.

Following the orientation sessions, students select educational and vocational goals, from a list available to them, for junior high school, high school, and following graduation. Students then summarize in writing their tentative educational and vocational goals using directions and forms provided to them.

Although students' goals may be expected to change, the seventh grade students must begin with a series of statements which define their general and preliminary goals in the vocational and educational analyses to follow. As new information is derived and conclusions are reached, provision is made for students to restate goals, subject to the general approval of the counselor.

It is the task of the counselor to verify or assist in the revision of student goals through individual student-counselor conferences at least once each semester, each year.

The eighth grade students begin the school year by again recording educational and vocational goals based on the previous year's investigations, in a form which permits them to compare these with seventh grade goals. These goal statements help determine the particular occupations students will continue to investigate in more detail, identify new areas for investigation, and suggest the items to be emphasized in the self-evaluation analysis.

The same procedure for stating goals is followed at the beginning of grade nine. At this point, however, student goals are more precise statements of high school curriculum choices, as well as indications of post-high school educational and vocational plans.

Assessing student characteristics. The second objective is to evaluate those characteristics of students which are important for the selection and achievement of goals. During the course of each school year, the students record and summarize information about themselves. Prior to the assessment of each characteristic, they attend one or two group meetings. In these sessions, the counselor explains the nature of the particular student characteristic to be evaluated, the method to be used to measure and evaluate the characteristic, and how the information is interpreted and used in formulating decisions, making comparisons, and setting goals. The counselor administers tests, distributes the materials and forms students use to record the data, gives directions for completing self-ratings, indicates the deadlines for completing each self-evaluation summary, and identifies any sources of information needed by the student to derive the data.

In grade seven, the students accomplish the following activities through individual assignments:

1. Assess achievement
   a. record in a self-evaluation form
      (1) subject marks each marking period
      (2) achievement test scores from grade six
2. Assess personal interests/preferences
   a. complete checklist
      (1) work experience
      (2) hobbies
      (3) clubs, activities in school
   b. indicate preference for each activity
   c. summarize interests by broad occupational areas and strength of interest
3. Assess study skills/work habits
   a. complete SRA study skill assignments
   b. summarize effectiveness of study habits in each school subject

In grade eight, the students again record and summarize all information as it becomes available. Two differences are noted: the student examines personal preferences in greater detail, and adds two additional steps to the evaluation of characteristics; the comparison of grade eight summary evaluations to grade seven summaries, and the specification of any trends which emerge in student development.

The activities for grade eight students are then:

1. Assess achievement
   a. record in self-evaluation form
      (1) subject marks each marking period
      (2) current achievement test scores
   b. summarize in self-evaluation form
      (1) best grades
      (2) highest achievement score areas
   c. compare
      (1) eighth grade grades to seventh grade grades
      (2) eighth grade achievement results to sixth grade results
   d. indicate trend in achievement proficiency areas
2. Assess personal interests/preferences/traits
   a. complete checklists
      (1) work experience
      (2) hobbies
      (3) clubs, activities in school
   b. indicate preference for each activity
   c. summarize interests and personal traits by broad occupational areas and strength of interest
   d. compare eighth grade to seventh grade preferences/interests
   e. indicate trend continuity or reversal in areas of interest

3. Assess study-skills
    a. summarize effectiveness of study habits in each school subject
    b. compare with grade seven study habits evaluation

In grade nine, the students follow the same evaluative procedure, but have additional information about aptitudes available to them through the Differential Aptitude Test results. They continue to compare their test results, personal preferences and interests with those of grades seven and eight, and indicate three-year trends on the educational record forms.

Sources of information for self-evaluation are made available to students periodically as results become available. For example, sixth-grade achievement test scores and elementary school record summaries are presented to students upon entrance into grade seven. Grades are distributed at the end of each marking period, standardized achievement results are provided in grade eight, and Differential Aptitude Test results are reported in grade nine. Personal traits, interests, and preferences are itemized through checklists which will be devised and provided for student use.

The students accumulate a reservoir of information about themselves, have a way to organize the information, and derive a continuing description of personal growth and development with respect to a number of specific student characteristics.

Identifying educational and vocational opportunities. Information related to the identification of educational and occupational opportunities and the conditions and requirements associated with each exist in great quantity. The student's problem is to organize such material and to make selective studies of occupations meaningful to him. Once the student acquires the basic study tools, he pursues those opportunities in which he has interest.

As students enter grade seven, they are confronted by a new set of curricular and extra-curricular opportunities. Students are informed first, through orientation sessions, previously discussed, of the educational

and vocational opportunities available to them within the junior high school. The important thing is that students begin to associate the curricular and extra-curricular activities with some future goal or outcome. In order for the students to discover what relationships exist between current efforts and occupations or "careers," however, certain information about occupations must be examined first.

The students attend one to three group sessions during which the counselor, using a variety of audio-visual materials, discusses the world of work, and identifies the major occupational areas and the hierarchies within each area. The student is then presented with a comprehensive reference chart showing him where to find information about vocational and educational opportunities. Such methods for information gathering as personal interviews and film viewing are suggested in addition to reference documents and books. Students are then assigned to locate particular kinds of information which necessitate the use of several kinds of reference materials. The assignment may be more meaningful initially if the students seek occupational information about a job held by a parent or friend. Students complete the assignment in a designated time period, bring it to the counselor at the next group session for review and discussion, and take a brief "test" to determine knowledge and use of primary reference materials. Students who fail to pass the test are given an additional assignment to complete.

In the next step, the student selects several broad occupational areas to investigate from a list which includes the occupational areas for which training will be provided in the vocational-technical school. The student has already completed a survey of his interests and personal preferences and, in group session, the counselor explains how these might influence the selection of occupational areas to investigate.

The student then begins to collect information, classifying occupations by selected occupational characteristics. Very specific guidelines which indicate the kinds of facts to be obtained, and the degree of specificity in summarizing and classifying the information will be provided each student in chart form. For example, the following list suggests the kinds of information which will be requested for each occupational area to be studied:

- General ability level requirements for entry
- Interests associated with the occupational area
- Educational requirements for entry
- Educational costs involved
- Physical requirements
- Skill requirements
- Professional membership affiliations
- Projected occupational area outlook
- Environmental contexts of occupational areas
- Earnings and wages

The seventh grade student will be expected only to classify information into general categories. The intent is that each student, in completing the task, identifies those things which basically differentiate one occupation from another. A number of check points are established in order for the students to return the completed work, and discuss the findings as they relate to the things a student is doing in school.

In grade eight, the student again investigates selected occupations, using pre-established guidelines, but is requested to gather more specific data about the occupations. Following the seventh grade evaluation, he may, in addition, reject occupations previously selected, or select entirely new areas to investigate. However, the process of studying the occupations remains essentially the same. Students with similar occupational interests meet together with the counselor, in special sessions, to exchange information following individual investigations.

The various high school courses of study and the ways in which selection of different high school curricula lead to different educational and vocational outcomes are discussed in group meetings. At the end of grade eight, the student makes a tentative written selection of high school program curriculum, which is approved by parents and counselor.

In grade nine, the investigation of opportunities centers around the actual selection of a high school curriculum. A continued study of occupations concentrates on more specific aspects of jobs. The counselor approves

the occupations selected for study to insure that students have made selections which reflect a variety of occupations from several occupational levels, and coincide with student credentials and goals. It is then arranged for students who express a particular interest in an occupation or occupational area to take field trips to local industries corresponding to their vocational preferences. Those students who have tentatively selected the vocational-technical school in grade eight tour the vocational-technical school facility and speak with those teachers who represent areas in which they are interested.

Selecting a course of action. Selecting a particular course of action requires two steps. The first is the analysis of the consistency among goals, capabilities, interests, and the available educational and vocational opportunities. The second is a choice from among various alternatives, and a statement of what is to be accomplished.

During the course of the school year in grade seven, the student, as previously noted, accumulates data about those characteristics which define him as an individual with certain goals, abilities, interests, and preferences. In addition, the student investigates a number of educational and vocational opportunities which may be available to him. At the end of the school year the student matches his credentials, self-ratings, and goals with the requirements and characteristics of those occupations he has investigated. The manner in which the student has collected the information, according to the guidelines to be furnished, will permit the student to answer the question, "Do I have the kinds of credentials, goals, and interests which are suggested or required by the occupations I have studied?" Students write answers to a series of prepared questions which indicate to them which of their ideas about educational and vocational planning are consistent with their achievement to date, and which are not. Students then summarize their findings by proposing the educational and vocational areas they will investigate in grade eight and submitting these, in writing, to the counselor for approval. In addition, each time the student spends time with the counselor in an individual conference, a form which summarizes the content of the conference and indicates the conclusions or decisions reached

will be completed and returned to the counselor. In this way, the student is provided with an opportunity to analyze and evaluate information.

In grade eight, the student completes the same matching process, summarizes the analysis, compares the results with the previous years' conclusions, and proposes the opportunities he will pursue in grade nine. In addition, he indicates in writing his choice of a high school curriculum. It may occur that a student decides on a particular educational plan or vocational area in grade seven and exhausts an investigation of the area. In such a case, the student must be encouraged to investigate other occupations in which he shows at least some interest. This is important if the student is to know enough about the nature of different occupational areas to make a reasonable choice.

Conclusions reached by the student as a result of investigating occupations and opportunities will be reflected directly in the four-year high school plan which is required of all students in grade nine. The educational decisions of the student are discussed in an individual student-counselor conference, and the resulting plan is approved by parents. In addition, a "test" is administered to students which measures the extent to which the student has achieved those capabilities involved in the educational and vocational planning process. The results of this test are used to identify problem areas which are common to students, and to detect necessary revisions in the guidance program.

Adjusting decisions. As indicated in the original objective, decisions are adjusted whenever necessary as conditions change in the individual or in the opportunities available to him. It is likely that most adjustments will occur when students are selecting courses and occupational areas for investigation.

All students are affected by administrative decisions and requirements to which they must conform. Once a decision is reached, the reasons, facts, and rationale which formed the basis for change must be given to students and parents. Changes which originate with the student will be requested by him, in writing, prior to an individual conference with his counselor, giving the reasons for the change.

The eighth grade student may find the need to alter his goals and, therefore, to change his study from one occupational area to another. During the school year, he may change his plans, always subject to the approval of the counselor. Each time this occurs, a student must complete a form which indicates the reason for the change, and a statement of the new direction or course of action he will take. This exercise again emphasizes the fact that decision adjustments may occur, but points out that they should be based on a set of facts which makes it evident that the change is consistent with changing conditions in the individual and in his opportunities.

At the beginning of grade nine, students review the tentative decisions they made at the end of grade eight regarding high school courses of study. Once again, as new data become available, the students record and summarize those facts which demonstrate that a course of action different from the one previously described is necessary.

Each time a decision change is effected, the counselor is responsible for identifying the change and its implications for all school personnel who will be affected by the change.

Materials Development

The success of the vocational guidance program depends in large part on the availability of materials. Guidance information and materials currently available in the Quincy schools constitute a substantial portion of required materials needed to implement this plan. However, the plan requires a number of new items for distribution to counselors and students. To meet the needs of individualized study, and to maximize the effectiveness of group sessions, the following materials will be developed.

1. Counselor Handbook, specifying all counselor activities by grade
   a. all forms used in the vocational guidance plan
   b. outline by units of the materials to be covered in group sessions, including assignments for students
   c. references and source materials list, including comprehensive information regarding the entire

range of high school offerings, and the occupational areas and occupations for which training will be provided in the vocational-technical school

d. a copy of any instruments to be used in measuring student progress in developing capabilities relative to educational and vocational decision making.

2. Student Handbook or Portfolio
   a. description and schedule of all guidance activities in which student will participate
   b. description of the approach to the individualized study of occupations
   c. materials needed to complete individual assignments in vocational guidance and educational planning
   d. forms for recording and summarizing the results of self-evaluations and occupational analyses
   e. descriptions of high school courses of study and the requirements of each
   f. list of references to be used in completing assignments

The handbooks for counselors and students would be most efficient if they took the form of a loose-leaf binder to permit the inclusion of new materials as they are generated, and provide for periodic updating of resources as the program begins operation. Completed student portfolios should be collected and retained on file at the end of each school year, to be made available for use by the counselor and student in the following year.

Staff Training

Preliminary orientation of junior high school counseling staff members has begun. Individual counselors have visited the current vocational-technical school facility and discussed school offerings and operation with members of the administration and faculty. Project ABLE staff members also

presented an overview of the curriculum development procedures and vocational guidance program development to each counselor.

It is expected that some variation in the details of the vocational guidance program operation will be necessary from building to building. Meetings with junior high school administrators and guidance personnel will be used to arrange for implementation in each building, including the assignment of responsibility for the direction and operation of the program. When program materials become available, the plan to be followed in each building will be described and all necessary information, instructions, and materials will be provided to the staff of the building. Periodic sessions, following installation of the program, will be scheduled to review program operation and to solve any problems which arise.

REFERENCES

American Institutes for Research. Development and evaluation of an experimental curriculum for the new Quincy (Mass.) Vocational-Technical School. Pittsburgh: Institute for Performance Technology, November 1964.

American Institutes for Research. Project ABLE: First quarterly technical report. Pittsburgh: Institute for Performance Technology, June 1965. (a)

American Institutes for Research. Project ABLE: Second quarterly technical report. Pittsburgh: Institute for Performance Technology, September 1965. (b)

American Institutes for Research. Project ABLE: Third quarterly technical report. Pittsburgh: Institute for Performance Technology, December 1965. (c)

PLANS FOR NEXT QUARTER

The following activities are planned for the quarter ending 30 June 1966:

1. The Advisory Panel will meet to review the curriculum outline and the junior high guidance program. Panel members also will work with small Quincy faculty groups on the curriculum for several areas, including mathematics, science, English, social studies, home economics, and business education.

2. Selection and development of instructional materials, methods, aids and procedures, and development of performance measures will absorb a larger proportion of project effort.

3. Development of junior high materials to support the guidance program and the training of staff will continue.

4. Arrangements for implementation of the guidance program in the several junior high schools will be made.

5. Development of plans for the senior high guidance program will begin.

APPENDIX A

GENERAL VOCATIONAL OBJECTIVES

I. CHOOSING A CAREER

A. Making a Realistic Choice

1. Self-evaluation

a. Can evaluate own aptitudes and abilities with reference to broad occupational areas

b. Can assess own interests as they apply to broad occupational areas

c. Can evaluate own achievement level (academic standing) in relation to that of his peers for purposes of college entrance

d. Can evaluate own educational achievement in relation to occupational areas

e. Can evaluate own physical characteristics such as age, sex, or handicaps in relation to specifications set by employers for hiring

f. Can assess own abilities and financial resources relative to the educational requirements for broad occupational areas

g. Can assess own personality in relation to requirements of broad occupational areas

h. Can evaluate potential occupational area choices in terms of his current life context (personal and parental aspirations, background, etc.)

2. Evaluation of world of work

a. Can identify sources of information about occupations and occupational areas where vacancies exist; can extract pertinent information from the sources

b. Can identify skill requirements for broad occupational areas

c. Can describe or explain the concept of automation; can identify occupations for which skills and knowledges are likely to change in a relatively few years

d. Can identify educational and achievement requirements for given occupational areas

e. Can identify sources of post-high school training

f. Can select appropriate sources of financial assistance for post-high school training

g. Can identify professional or technical associations in which membership is required for performance in a given occupational area

h. Can identify the personality characteristics desirable for given occupations

i. Can assess the relative social status of various occupations

j. Knows where to find minimum job requirements for various levels within fields of work

k. Can evaluate the relative advancement possibilities associated with broad occupational areas

3. Combining knowledge of self and world of work--making tentative and general choices

a. Can identify careers which have requirements and characteristics compatible with one's own aptitudes, skills, financial status, educational achievement, plans, etc.

B. Accepting the Consequences of Career Choice

1. Accepting the success and failure criteria

a. Can identify the factors necessary for advancement in a given occupational area (skill-educational-interpersonal improvement)

b. Can identify factors that can result in demotion or loss of job

2. Accepting career hierarchies and vertical mobility limits

a. Can identify the occupational hierarchies associated with given occupational areas

b. Can identify the requirements for moving to a higher position in a given occupation

c. Can state own goals with respect to vertical mobility; can compare own goals with mobility limits of given occupational areas

3. Accepting the social statuses associated with an occupation

   a. Can identify the social demands which may be associated with given occupations (e.g., entertainment, dress)

   b. Can identify social roles required for successful performance of given occupations

   c. Can estimate the amount of time required for the social aspects of a given occupation

   d. Can evaluate own goals with respect to social status; can compare own goals with status limits of given occupational areas

4. Accepting duties and task requirements associated with an occupation

   a. Can identify duties and tasks associated with an occupation

   b. Can identify own abilities and personality characteristics with regard to duties and tasks

5. Demonstrating sensitivity to common satisfactions and dissatisfactions of an occupation

   a. Can assess the potential satisfactions and dissatisfactions associated with given occupations (e.g., a sense of accomplishment or no sense of accomplishment, recognition from subordinates and peers or unhappy co-worker relationships, high or low income, taking responsibility, being able to help others, routine or repetitive tasks, social status in community, dislike for superiors, undesirable working conditions and working hours, and opportunity to develop unique solutions to problems)

   b. Can evaluate own ability to perform a given job satisfactorily in spite of one or more major sources of dissatisfaction present

6. Accepting personal and family demands associated with an occupation

   a. Can identify and assess the personal sacrifices necessary for successful performance in a given occupation

   b. Can identify and assess hardships associated with given occupations that affect one's family

7. Accepting the roles of management, labor organizations, and government with respect to given occupations and to the economy

   a. Can assess the roles of labor organizations with respect to given occupations and the economy

   b. Can assess the roles of management or owners with respect to given occupations and the economy

   c. Can assess the roles of government with respect to given occupations and the economy

8. Accepting the environments, contexts, and settings of an occupation

   a. Can identify the environmental setting of a given occupation

C. Planning for Contingencies

1. Providing for technological change

   a. Can assess the extent to which technological change may downgrade or upgrade a given occupation by affecting the employment opportunities and occupational requirements

2. Accounting for social and economic trends

   a. Can identify social and economic trends and their effects on social and economic aspects of various occupations

   b. Can assess the future social and economic status of a given occupation

   c. Can identify alternative occupations whose training and experience are sufficiently similar to those of a given occupation that they may serve as alternate employment possibilities in case technological change eliminates a given occupation

3. Providing for educational and occupational failure

   a. Can identify alternative occupations in which the same training and experience is required but the ability requirements are less strict

   b. Can identify alternative careers for which own abilities and interests can qualify one, but for which the educational achievements required are less

II. FORGING A CAREER

A. Preparing for a Career

1. Can identify realistic educational and training plans for a given occupational area

a. Can identify sources which provide information concerning the content of various educational and training courses

b. Can match occupational requirements with appropriate educational and/or training programs

c. Can identify alternative training routes to various occupational areas

d. Can identify length of time which must be committed to training for a given occupational area

e. Can estimate approximate cost of training in a given occupational area

2. Can assess ability to obtain financial aid for educational purposes

a. Can identify sources of financial aid

b. Can identify requirements or restrictions involved with obtaining scholarships and other financial aid

3. Learning critical requirements for a given occupation

a. Can recognize the elements of a training course which are of critical importance to one's own specialty or area of interest

b. Can identify non-required courses or extra-curricular activities which can enhance one's skill and knowledge in critical areas